UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
HAVAN, THU THAO

ART UNIT	PAPER NUMBER
3691	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *three* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *26 April 2007*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-21* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-21* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Response to Arguments

In view of the Appeal Brief filed on April 26, 2007, PROSECUTION IS HEREBY

REOPENED. The new non-final office action set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied

by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130,

1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims **1-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebbs et

al. (Provisional application no. 60/248,251) in view of Gulati (US 6,778,968).

Re claim **10**, Ebbs teaches system for auditing an electronically based auction, which is located on an auction site (para. 0040, 0043, and 0052)., comprising:

(a) an auction management module, located on the auction site, wherein the auction management module hosts the auction for a seller (para. 0027-0028);

(b) a plurality of actual bidder inputs, associated with the auction management module, to allow actual bidders to place bids in the auction on the auction site (fig. 5);

(c) an auction auditing module, in communication with the auction management module, to audit an auction taking place on the auction site (para. 0040, 0038, and 0041); and

(d) ... controlled by the auction auditing module, to submit at least one bid to the auction (para. 0042 and 0029).

However, Ebbs does not explicitly teach simulated bidder data. On the other hand, Gulati discloses simulated bidder data when he discloses constructive simulations (col. 19, lines 1-29). He discloses the generator space and properties of the generator space resulting from the closed expression for the GNS construction is useful when applied to a stratified loan portfolio. Mathematically, Gelfand-Naimark Segal (GNS) construction is a special case of combinatorial Hopf algebra for random walks. Co-product construct of the Hopf algebra plays the role of `sharing out` possible explanations of a fact. The method exploits Hopf algebras or quantum groups. This provides a generalization to ordinary groups and random walk algorithms applied in classical and neoclassical portfolio analysis. This analogy is necessary to capture the essence of auctions in secondary instruments where the complex coupling between primary origination markets, securitization markets,

and external variables forbids or reduces the attractiveness of certain decomposition. Two broad mechanisms provide a vehicle for capturing these time-dependent exclusions (1) constructive simulations: explicit enumerations in terms of i.e., classical algorithmic structures such as graph-theory, probabilistic networks, or stochastic transition networks (STNs); or (2) generalized group theory: an entire class of compact, closed-form portfolio state space analysis and management operators (expressed via tensor products) which can accommodate secondary market dynamics. The invention has chosen the latter approach to be maximally inclusive of all and any independent and dependent sub-portfolio configurations allowable upon the secondary object transaction. Thus, it would have been obvious to one of ordinary skill in the art to simulate bidder data to mathematically construct data when applying information in to audit according to a portfolio in an auction.

Re claim **2**, Ebbs teaches auction auditing module audits the auction to verify that the auction functions in a manner consistent with represented procedures of the auction site (para. 0040-0041).

Re claim **3**, Gulati teaches a data verification component to verify that data submitted to the auction is represented accurately in the auction (col. 24, lines 19-39).

Re claims **4** and **15**, Gulati teaches a data verification component to verify that a correct winning bidder was selected (col. 24, lines 1-38).

Re claims **5** and **19**, Gulati teaches simulated bidder data, wherein the simulated bidder data is removed in the background from the auction management module in the event

that the simulated bidder data wins the auction and a next best bidder is selected and reported to a seller (col. 4, lines 1-21).

Re claims **6** and **21**, Ebbs teaches a plurality of actual bidder inputs, which enable submission of bids to the auction through the auction management module (fig. 2).

Re claim **7**, Ebbs teaches an audit server to host the auction auditing module, wherein the auction auditing module is in networked communication with the auction management module (para. 0024-0026).

Re claim **8**, Ebbs teaches an auction server that hosts the auction management module (para. 0047 and 0050; fig. 1).

Re claim **9**, Ebbs teaches auction auditing module is hosted on an auction server with the auction management module (para. 0024-0027).

Re claims **11** and **16-17**, Gulati teaches a data verification component to verify that data submitted to the auction with the simulated bidder data is represented accurately and that a correct winning bidder is selected (col. 24, lines 6-38).

Re claim **12**, Ebbs teaches a shill detection module located in the auction audit module that detects the possibility that a seller is using a shill who is making bids in the auction (para. 0038-0040).

Re claims **13** and **20**, Gulati teaches simulated bidder data includes at least one bid to verify that bids are represented accurately in the auction management module (col. 4, lines 1-21).

Re claims **1, 14,** and **18**, Ebbs and Gulati teach a system as claimed in claim 10. Therefore the rationale applied in the rejection of claim 10 applies herein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Thao Havan whose telephone number is (571) 272-8111. The examiner can normally be reached during her flextime schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct-uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Thu Thao Havan
Art Unit: 3691
7/24/07